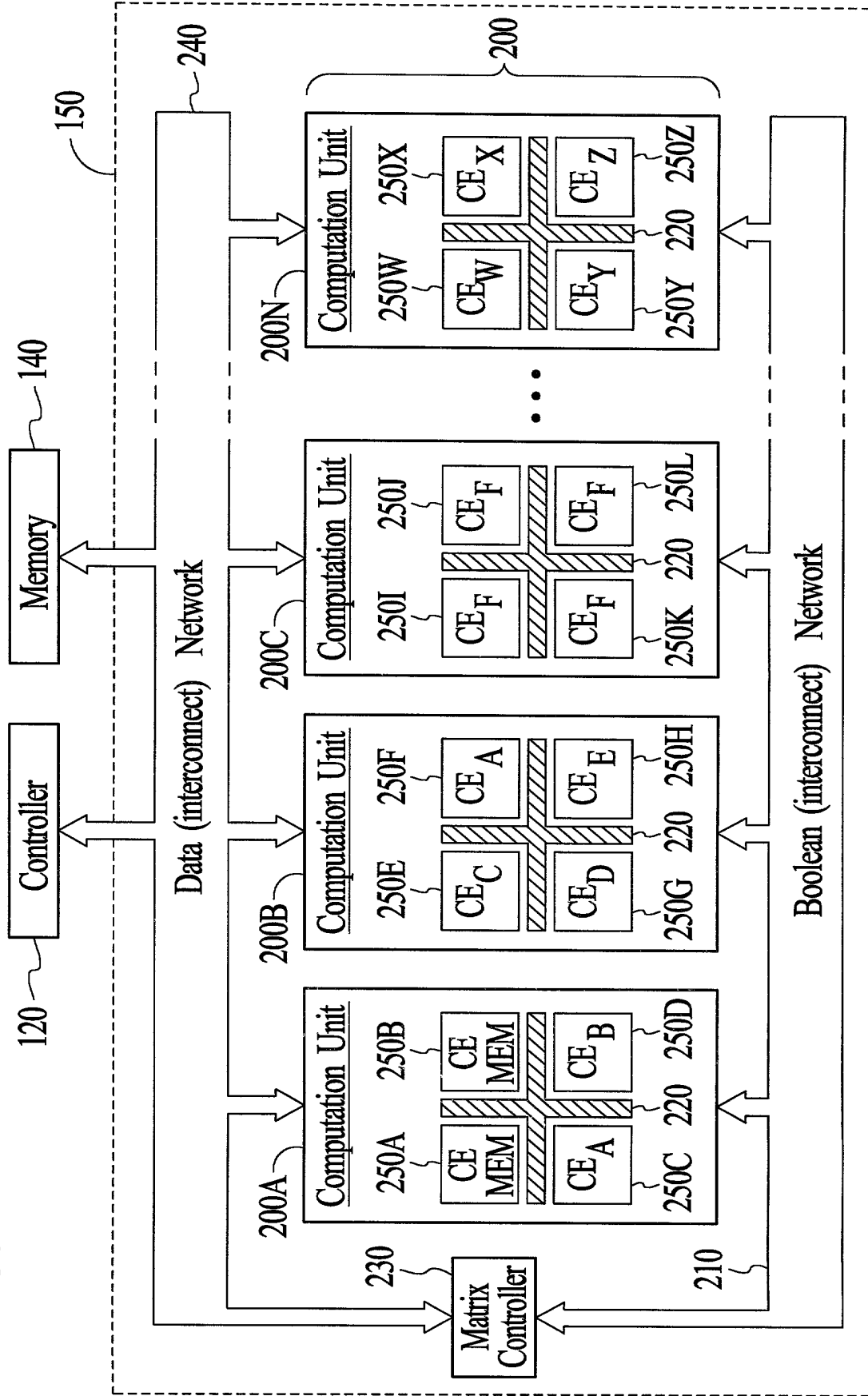


FIG. 1 100

FIG. 2



$$y[j] = \sum_{i=0}^j x[i], \quad j = 0, \dots, N-1; \quad N = 7$$

FIG. 3A

FIG. 3B

```

module partialSums (void)
{
    int16 x;
    int16 y = 0;
    const int16 N = 7;

    loop N {
        x = inputFIFO ( );
        y += x;
        outputFIFO (y);
    }
}

```

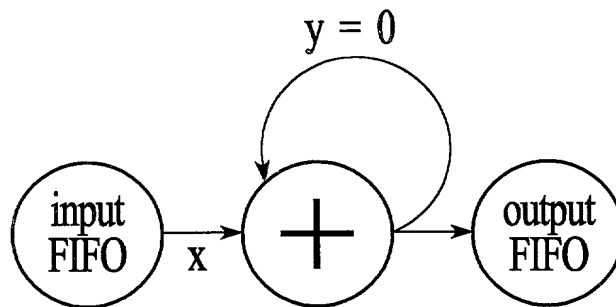


FIG. 3C

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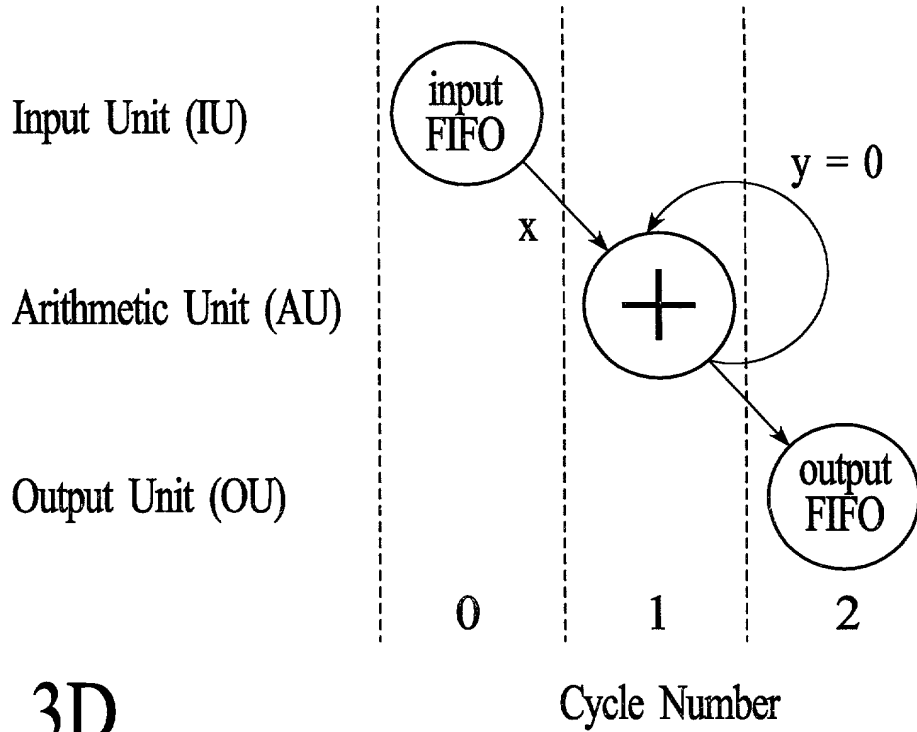


FIG. 3D

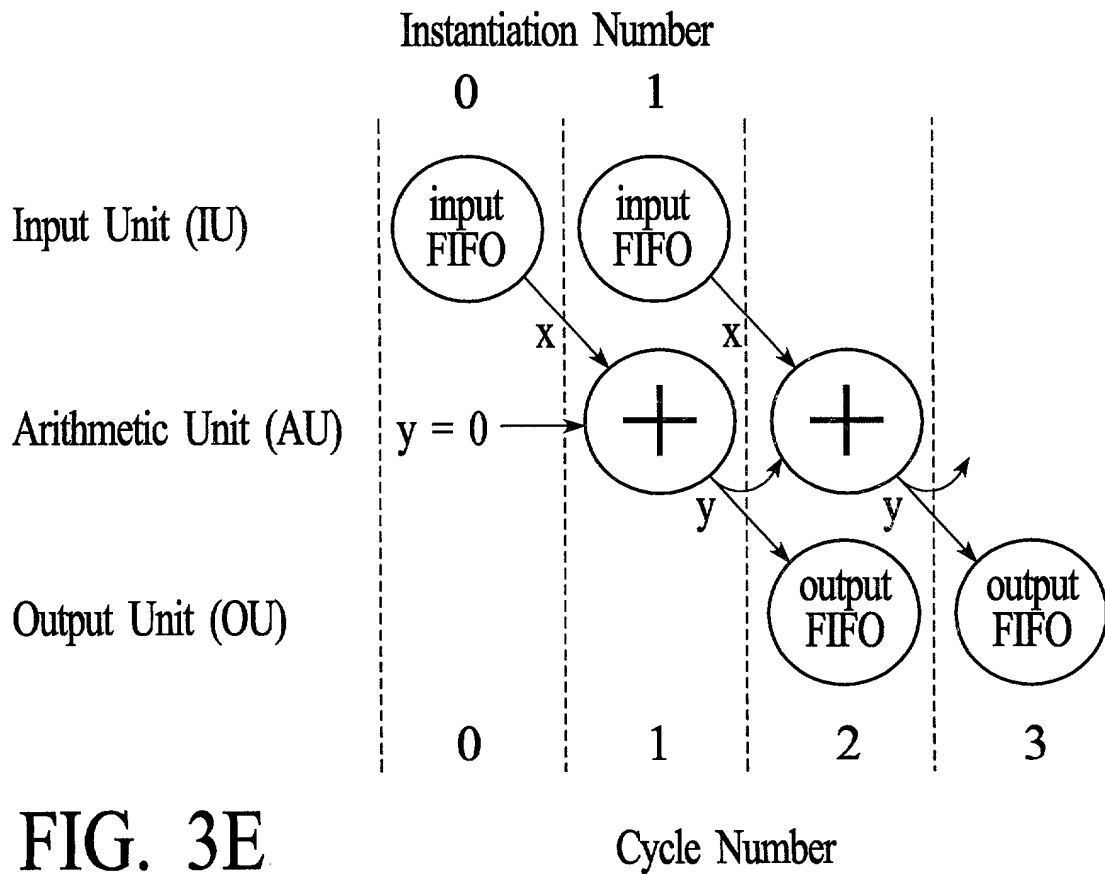


FIG. 3E

Cycle Number

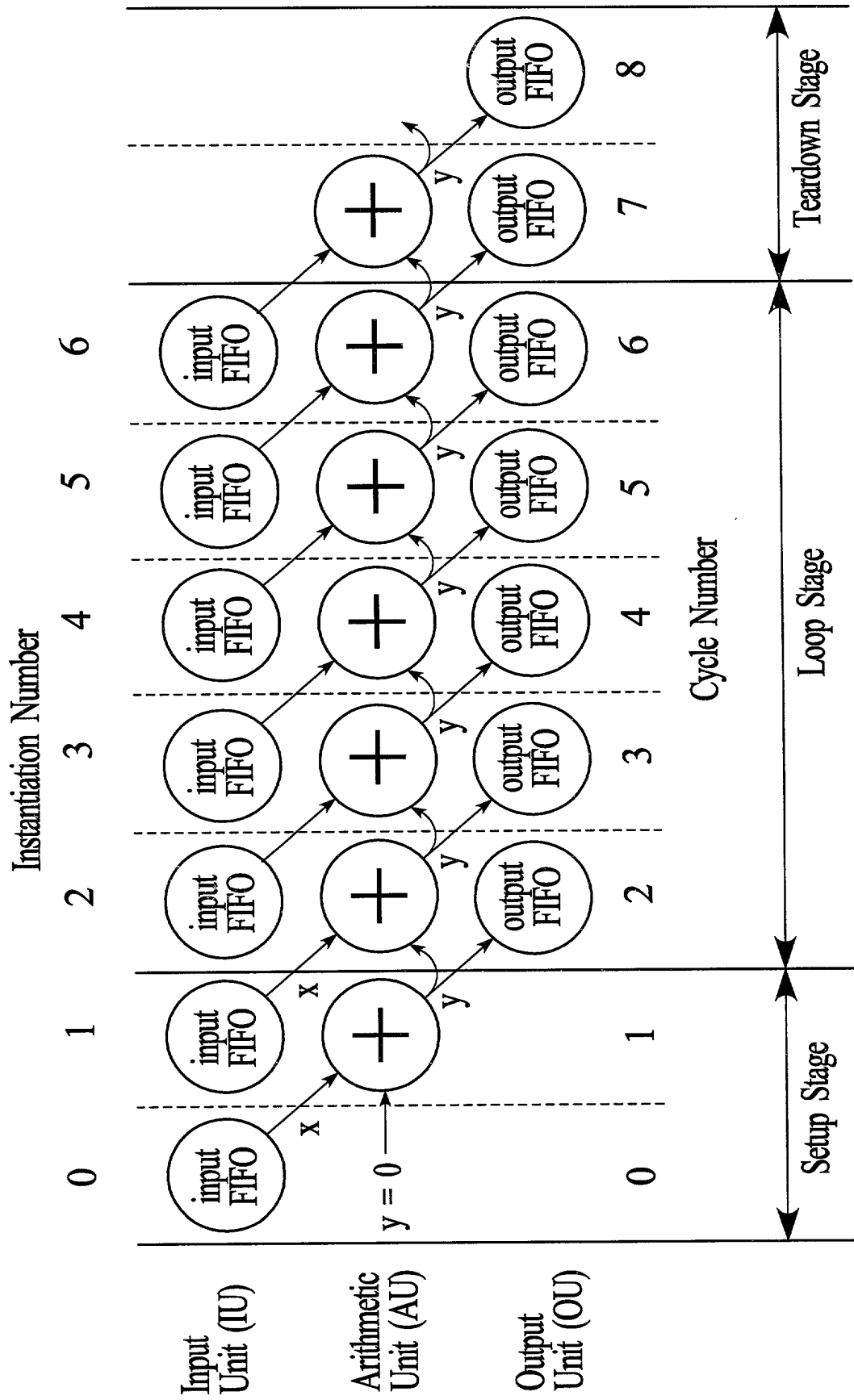


FIG. 3F



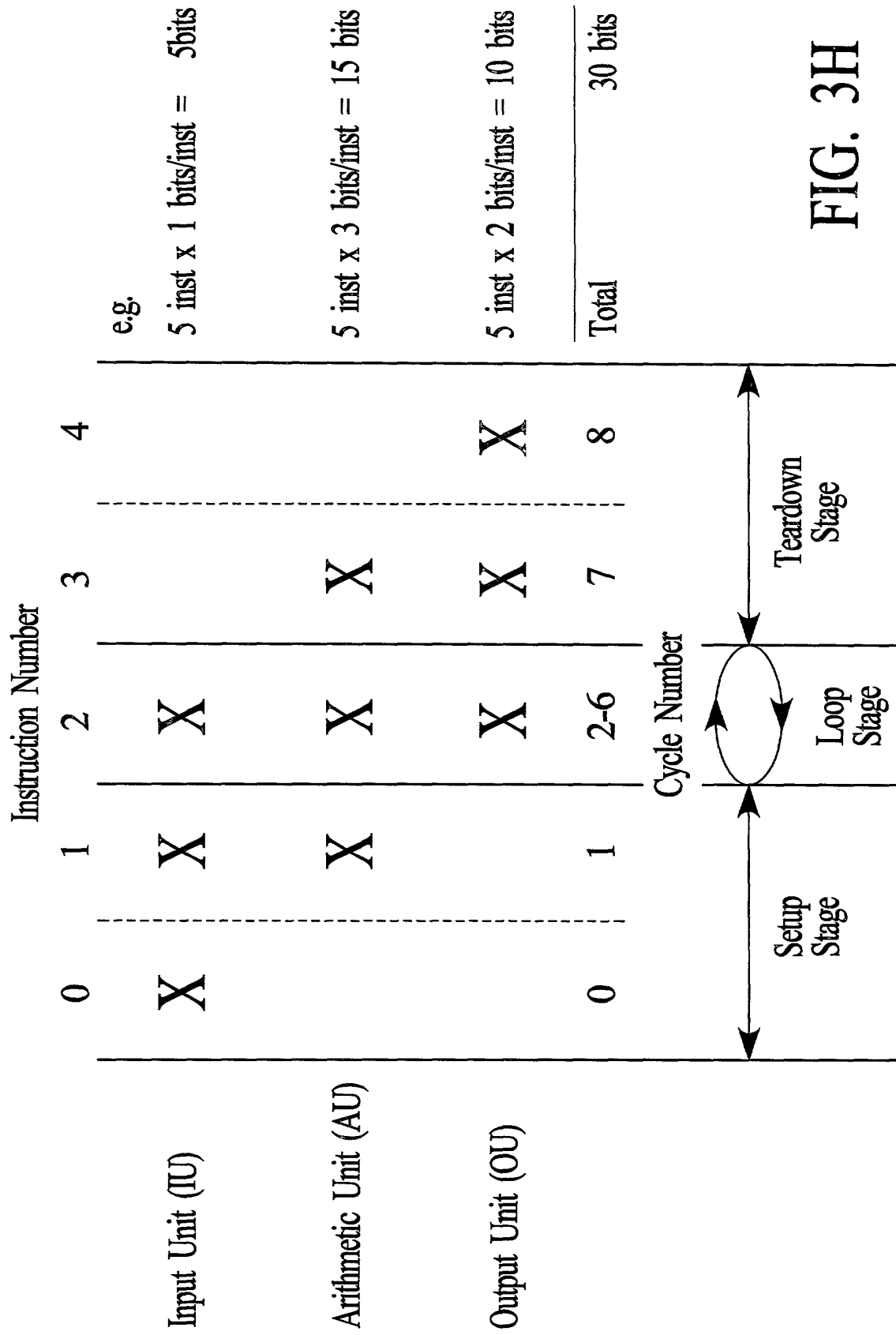


FIG. 3H

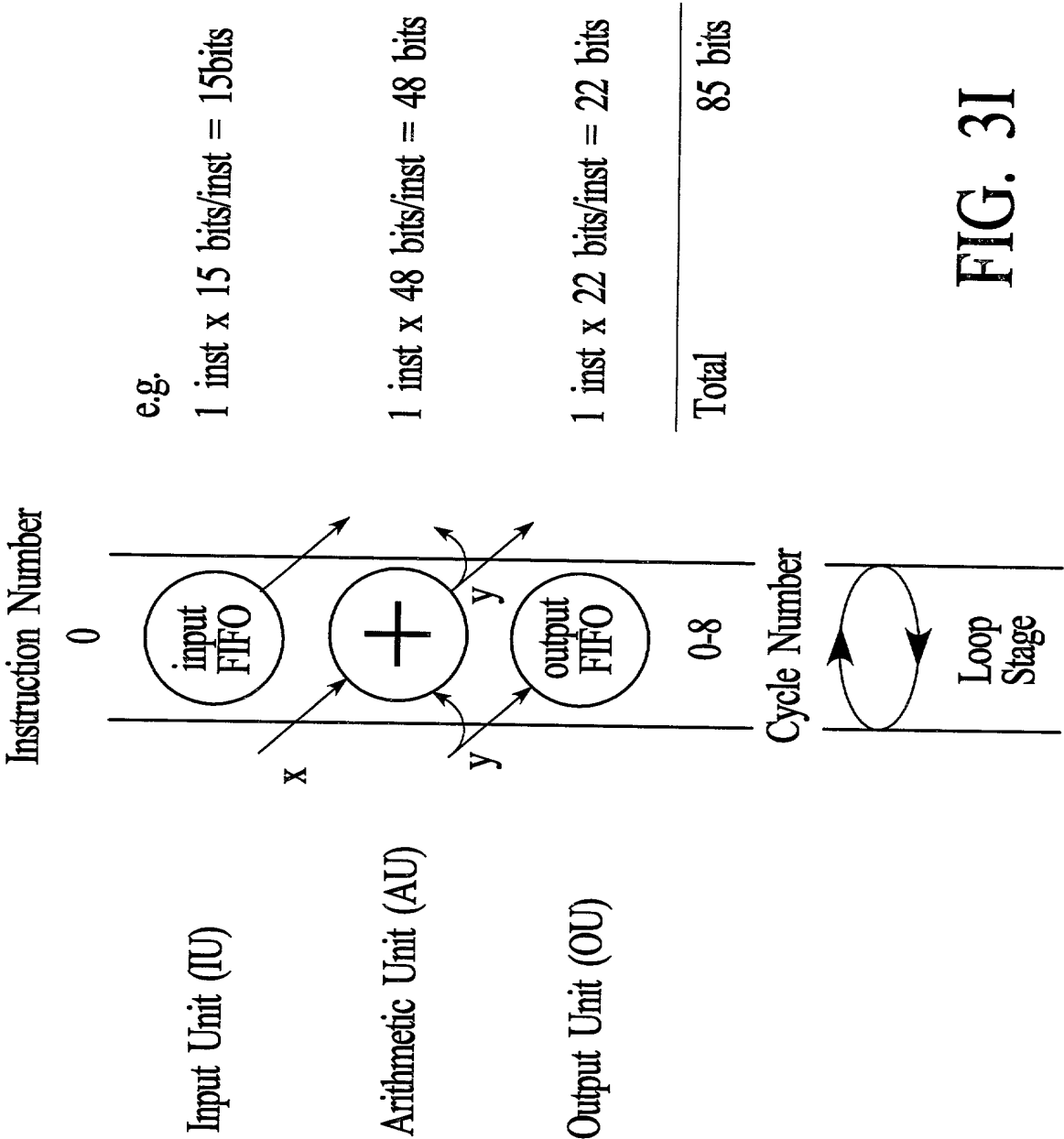


FIG. 3I



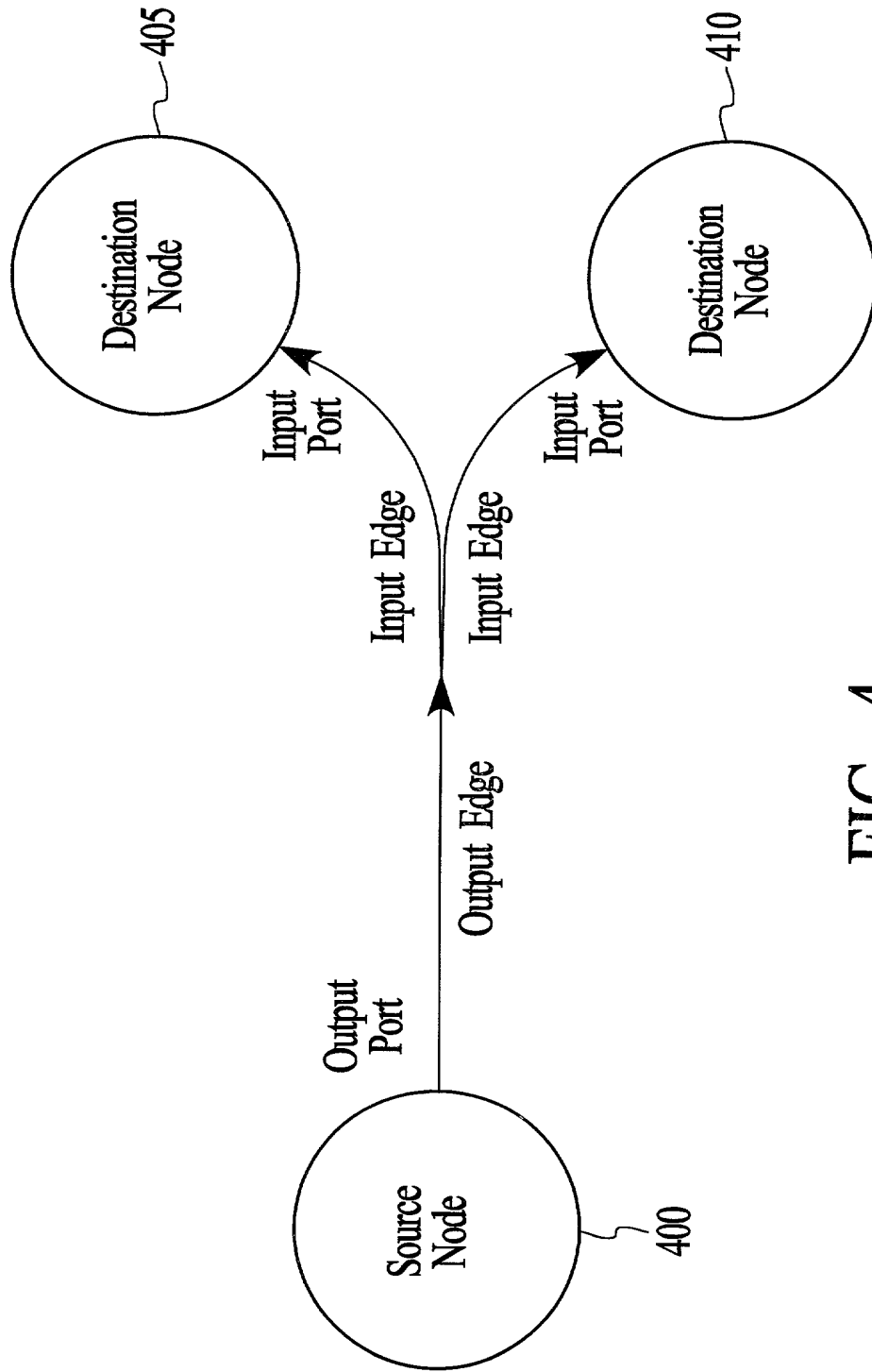


FIG. 4